

## CLAIMS

What is claimed is:

1. In a method of producing semiconductor chips wherein the chips are at least fabricated and characterized, the improvement comprising:  
marking with identifying indicia only those chips which are characterized for use.
2. The method of claim 1, wherein said marking is effected following packaging of the chips.
3. The method of claim 1, wherein said marking is effected as the last step in the production process.
4. The method of claim 1, wherein said marking comprises laser marking.
5. The method of claim 1, wherein said marking comprises:  
providing energy reactive marking material over surfaces of at least those chips which are characterized for use; and  
exposing at least selected portions of at least one of said surface and said energy reactive marking material to energy to form a mark on said surface.
6. The method of claim 5, wherein said exposing is effected without substantially creating an imprint in said surface.
7. A method for producing semiconductor chips, comprising:  
fabricating at least one semiconductor chip;  
determining whether said at least one semiconductor chip is suitable for use; and  
marking said at least one semiconductor chip only if said at least one semiconductor chip is determined to be suitable for use.

8. The method of claim 7, further comprising packaging said at least one semiconductor chip.

9. The method of claim 7, wherein said marking is effected as the last step in the production process.

10. The method of claim 7, wherein said marking comprises laser marking.

11. The method of claim 7, wherein said marking comprises:  
providing energy reactive marking material over at least a portion of a surface of said at least one semiconductor chip; and  
exposing at least selected portions of at least one of said surface and said energy reactive marking material to energy to form a mark on said surface.

12. The method of claim 11, wherein said exposing is effected without creating an imprint in said surface.

13. A method for producing semiconductor chips, comprising:  
providing at least one semiconductor chip which has been characterized as suitable for use and at least one semiconductor chip which has been characterized as unsuitable for use; and  
marking with identifying indicia only the at least one semiconductor chip which has been characterized as suitable for use.

14. The method of claim 13, wherein said providing comprises providing at least one packaged semiconductor chip which has been characterized as suitable for use and at least one packaged semiconductor chip which has been characterized as unsuitable for use.

15. The method of claim 13, wherein said marking is effected as the last step in the production process.

16. The method of claim 13, wherein said marking comprises laser marking.
17. The method of claim 13, wherein said marking comprises:  
providing energy reactive marking material over at least a portion of a surface of said at least one semiconductor chip which has been characterized as suitable for use; and  
exposing at least selected portions of at least one of said surface and said energy reactive marking material to energy to form a mark on said surface.
18. The method of claim 17, wherein said exposing is effected without forming an imprint in said surface.
19. The method of claim 13, further comprising comparing said identifying indicia to an acceptable identifying indicia model.
20. The method of claim 19, further comprising determining whether said identifying indicia substantially matches said acceptable identifying indicia model.
21. The method of claim 20, further comprising rejecting said at least one semiconductor chip which has been characterized as suitable for use if its respective identifying indicia does not substantially match said acceptable identifying indicia model.
22. The method of claim 21, further comprising removing said identifying indicia which does not substantially match said acceptable identifying indicia model from said rejected semiconductor chip which has been characterized as suitable for use.
23. The method of claim 22, further comprising remarking said rejected semiconductor chip which has been characterized as suitable for use.